

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A rotary compressor, comprising:
a compression mechanism including a cylinder having a cylinder chamber, a piston accommodated in the cylinder chamber eccentrically with respect to the cylinder, and a blade arranged in the cylinder chamber and defining the cylinder chamber into a first chamber and a second chamber, at least one of the cylinder and the piston rotating eccentrically as an eccentric rotation body;
a drive shaft configured for driving the compression mechanism;
a pressing mechanism configured for bringing a cylinder side end plate, which is provided at one end in an axial direction of the cylinder chamber and faces an end face in an axial direction of the piston, and a piston side end plate, which is provided at the other end in the axial direction of the cylinder chamber and faces an end face in an axial direction of the cylinder, close to each other in an axial direction of the drive shaft; and
a casing configured for accommodating the compression mechanism, the drive shaft, and the pressing mechanism,
the pressing mechanism being eccentric away from a center of the cylinder side or the piston side end plate of the eccentric rotation body, and
the pressing mechanism generating an axial-direction pressing force with a center of the pressing mechanism being eccentric away from a center of the drive shaft,
the compression mechanism having a plurality of discharge ports configured for discharging fluid compressed in the cylinder chamber to an outside of the compression mechanism, and
the pressing mechanism generating a pressing force in the axial direction, the pressing mechanism having a center that is outside a track with a radius of an eccentric amount of the eccentric rotation body with respect to the center of the drive shaft and eccentric to the discharge ports away from a center of the cylinder side or piston side end plate of the eccentric rotation body.

2. (Previously Presented) The rotary compressor of claim 1, wherein the cylinder chamber has a circular shape when viewed perpendicularly from the axial direction, and the piston is substantially circular.

3. (Previously Presented) The rotary compressor of claim 1, wherein the cylinder chamber has an annular shape when viewed perpendicularly from the axial direction, and the piston includes a substantially annular piston arranged in the cylinder chamber and defining the cylinder chamber into an outer cylinder chamber and an inner cylinder chamber.

4. (Previously Presented) The rotary compressor of claim 3 wherein the piston has a gap dividing the piston into a C-shape with a swing bushing slidably held in the gap, and forming a blade groove configured for holding the blade so as to allow the blade to move back and forth in the swing bushing, and the blade is disposed in the blade groove so as to extend from a wall face on an inner peripheral side to a wall face on an outer peripheral side of the annular cylinder chamber.

5. (Cancelled)

6. (Previously Presented) The rotary compressor of claim 1, wherein the pressing mechanism has a support plate that is arranged along a side of the cylinder side or the piston side end plate of the eccentric rotation body, a sealing ring for defining a first opposing section between the cylinder side or the piston side end plate and the support plate on an inner side in a radial direction and a second opposing section between the cylinder side end plate and the support plate on an outer side in the radial direction, the sealing ring is arranged eccentrically away from a center of the eccentric rotation body in one of the cylinder side end plate, the piston side end plate of the eccentric rotation body and the support plate, and the pressing mechanism allows a fluid pressure discharged outside the compression mechanism to work on the first opposing section.

7. (Previously Presented) The rotary compressor of claim 6, wherein the sealing ring is fitted in an annular groove formed in one of the eccentric rotation body and the support plate.

8. (Previously Presented) The rotary compressor of claim 1, wherein the cylinder has a slit that is formed at a portion eccentric from a center of the eccentric rotation body in a face portion opposite a face on a cylinder chamber side of the cylinder side end plate of the eccentric rotation body, and the pressing mechanism allows pressure of fluid discharged outside the compression mechanism to work on the slit.

9. (Previously Presented) The rotary compressor of claim 1, wherein the cylinder side has a groove and a through hole the groove is formed in a portion eccentric from a center of the eccentric rotation body on a face opposite a face on a cylinder chamber side of the end plate of the eccentric rotation body, the through hole is formed in the cylinder side end plate for allowing the groove to communicate with the cylinder chamber, and the pressing mechanism introduces a portion of fluid compressed in the cylinder chamber into the groove through the through hole to allow a pressure of the fluid to work on the groove.

10. (Previously Presented) The rotary compressor of claim 1, further comprising:

a sealing mechanism configured and arranged to prevent leakage of fluid in at least one of a first axial direction gap between an end face in the axial direction of the cylinder and the piston side end plate and a second axial direction gap between an end face in the axial direction of the piston and the cylinder side end plate.

11. (Currently Amended) The rotary compressor of claim 10, wherein the sealing mechanism includes a ~~chip~~ tip seal provided at least one of the first axial direction gap and the second axial direction gap.

12. (New) A rotary compressor, comprising:

a compression mechanism including a cylinder having a cylinder chamber, a piston accommodated in the cylinder chamber eccentrically with respect to the cylinder, and a blade arranged in the cylinder chamber and defining the cylinder chamber into a first chamber and a second chamber, at least one of the cylinder and the piston rotating eccentrically as an eccentric rotation body;

a drive shaft configured for driving the compression mechanism;

a pressing mechanism configured for bringing a cylinder side end plate, which is provided at one end in an axial direction of the cylinder chamber and faces an end face in an axial direction of the piston., and a piston side end plate, which is provided at the other end in the axial direction of the cylinder chamber and faces an end face in an axial direction of the cylinder, close to each other in an axial direction of the drive shaft; and

a casing configured for accommodating the compression mechanism, the drive shaft, and the pressing mechanism, the pressing mechanism being eccentric away from a center of the cylinder side or the piston side end plate of the eccentric rotation body,

the pressing mechanism generating an axial-direction pressing force with a center of the pressing mechanism being eccentric away from a center of the drive shaft, and

the cylinder having a slit that is formed at a portion eccentric from a center of the eccentric rotation body in a face portion opposite a face on a cylinder chamber side of the cylinder side end plate of the eccentric rotation body, the pressing mechanism allowing pressure of fluid discharged outside the compression mechanism to work on the slit.